

NOTE ON A SOUTHERN PUPA.

BY H. A. PILSBRY.

During the past year the writer has had occasion several times to examine and determine specimens of a certain *Pupa* from various localities in the South, the extreme points being Arizona and Florida. It seems to him highly desirable to have a name and a recognizable description and figure for a form so widely distributed, and so constantly separated by local naturalists from the already known species as the following:—

Pupa hordeacella n. sp. (Pl. I, figs. G, H, I, J, K.)

The shell is of a long-ovoid shape, smaller and more slender than *P. servilis* Gould, translucent, waxen-white, finely striate; the aperture is rounded, with a thin, expanded peristome. Within, there is on the parietal wall, an entering fold arising near the termination of the outer lip, its edge a trifle sinuous or nearly straight; the columella has a fold about in the middle. There is a tiny, deep-seated fold on the base of aperture, near the columella, an entering fold within the outer lip, equidistant from the above-described parietal and columellar folds, and a tiny denticle above it. The columellar fold is not situated so high on the pillar as in *P. servilis*. The latter half of the body-whorl is flattened on the outer-lower portion, as the figure J. shows. There is a low wave-like ridge or 'crest' also, but scarcely visible in many specimens.

Alt. 1.8, diam. 8 mm.

The figures were drawn with the aid of camera lucida. They should be compared with Gould's excellent figures of *P. servilis*, in Boston Journal of Natural History, vol. IV, plate 16, fig. 14, and those of *P. pellucida* in Strebel's Beitrag zur Kenntniss der Fauna mexikanischer Land-und Süsswasser-Conchylien, Theil iv, pl. xv, fig. 10. The latter are the more valuable in this connection as they are not only faithful drawings on a sufficiently large scale, but are the only ones drawn from Continental specimens (Vera Cruz, Mexico). The measurements given by Strebel and Pfeffer are alt. $2\frac{1}{2}$, diam. of last whorl fully 1 mm.; alt. of aperture, $\frac{3}{8}$ mm. Gould's *P. servilis* and Pfeffer's *P. pellucida* were both described from Cuba. I see no reason for not following W. G. Binney in considering them synonymous, *pellucida* having precedence.

The shells above described were at first referred to the *P. pellucida* of Pfr., or *P. servilis* Gld.; and later the writer gave to them the mss. name of *P. hordeacella*. Whether the characters of the form prove constant enough to give it specific rank, or whether it will finally be considered a variety or race of *P. servilis* Gould, is a matter that my acquaintance with the group does not enable me to decide. In its constantly much smaller size we have a perfectly tangible character that will enable one to readily separate the two forms without the use of a magnifier.

In this connection it will be perhaps useful to point out the fact that in the specimens sent out by Gabb as his *Pupa hordeacea* there are two forms mingled. One is the present species; the other is the true *hordeacea*, a form of about double the size of this, with a more acute, stronger crest or ridge behind the outer lip, and a decidedly pinched base to the last whorl. *P. hordeacea* has the teeth of the outer lip more deep-seated and smaller than *P. servilis* or *P. hordeacella*.

The specimens before me are from the following sources:—Arizona, collected by Dr. Horn; New Braunfels and other places in central Texas, collected by Mr. J. A. Singley and the writer; St. Augustine, Florida, collected by Mr. C. W. Johnson, of the Wagner Institute, Philadelphia.

The figures on Plate I are drawn from New Braunfels specimens, which may be regarded as typical for the species.